Architecture of Grammar, day 2
DGfS Summerschool 2024 University of Göttingen

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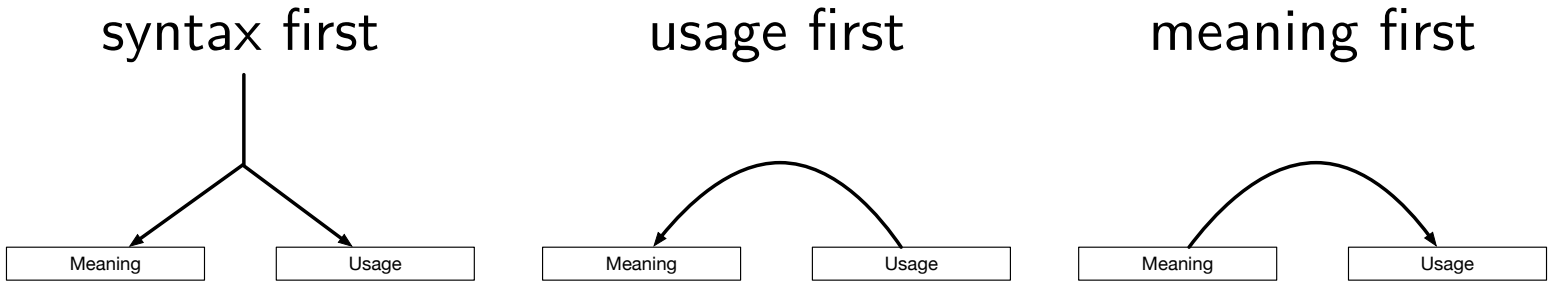
Overview

Conceivable architectures:



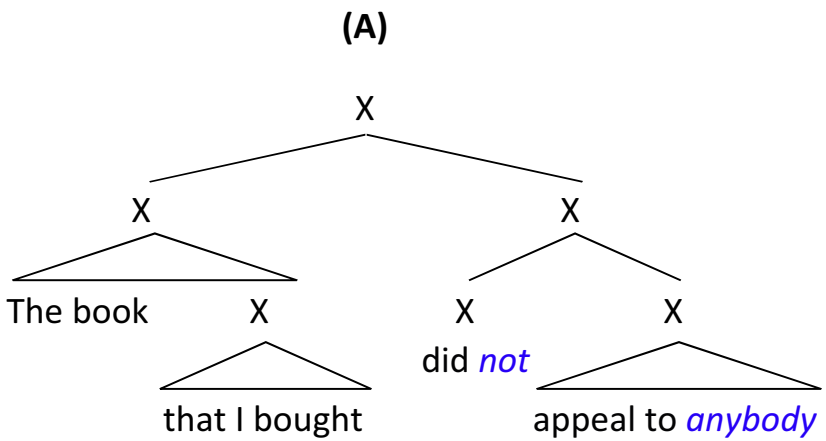
Predicted sensitivities for grammaticality:

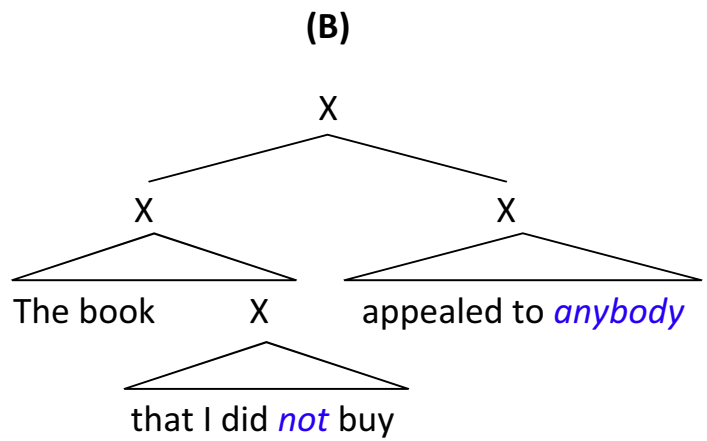
- **syntax first:** underdetermined, but found to be structure, case, agreement, category
- **usage first:** linear order, information density
- **meaning first:** structure, logical properties

Order vs. Structure

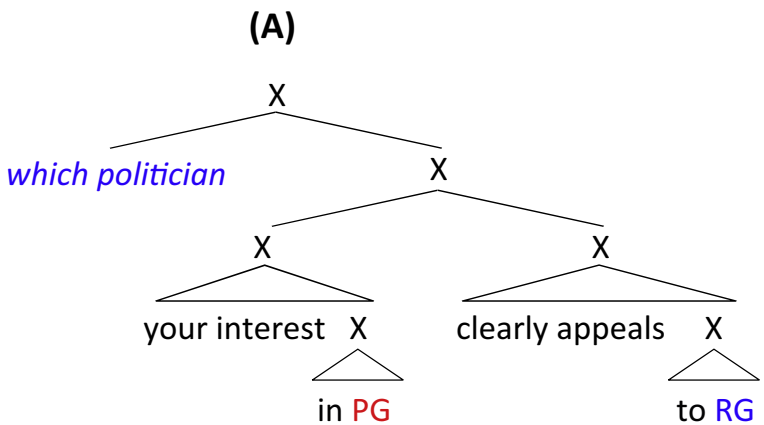
Everaert et al. (2015): Three classic arguments for structure

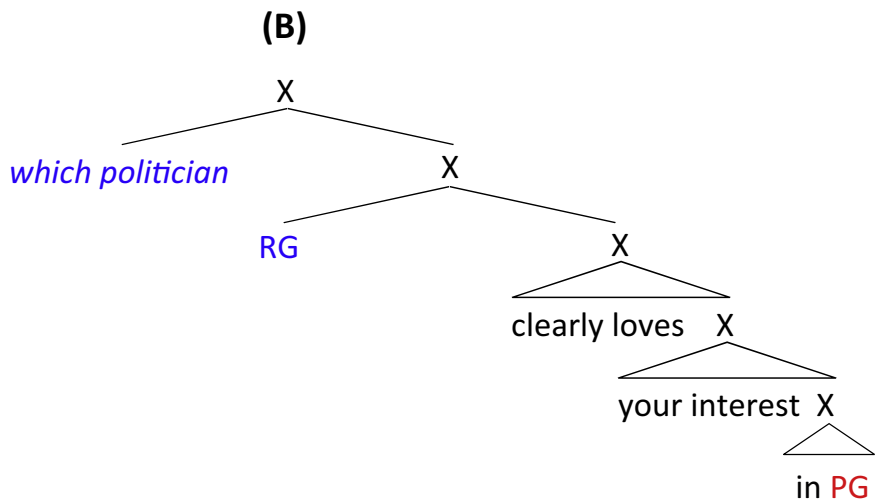
1) Negative Polarity Item licensing:



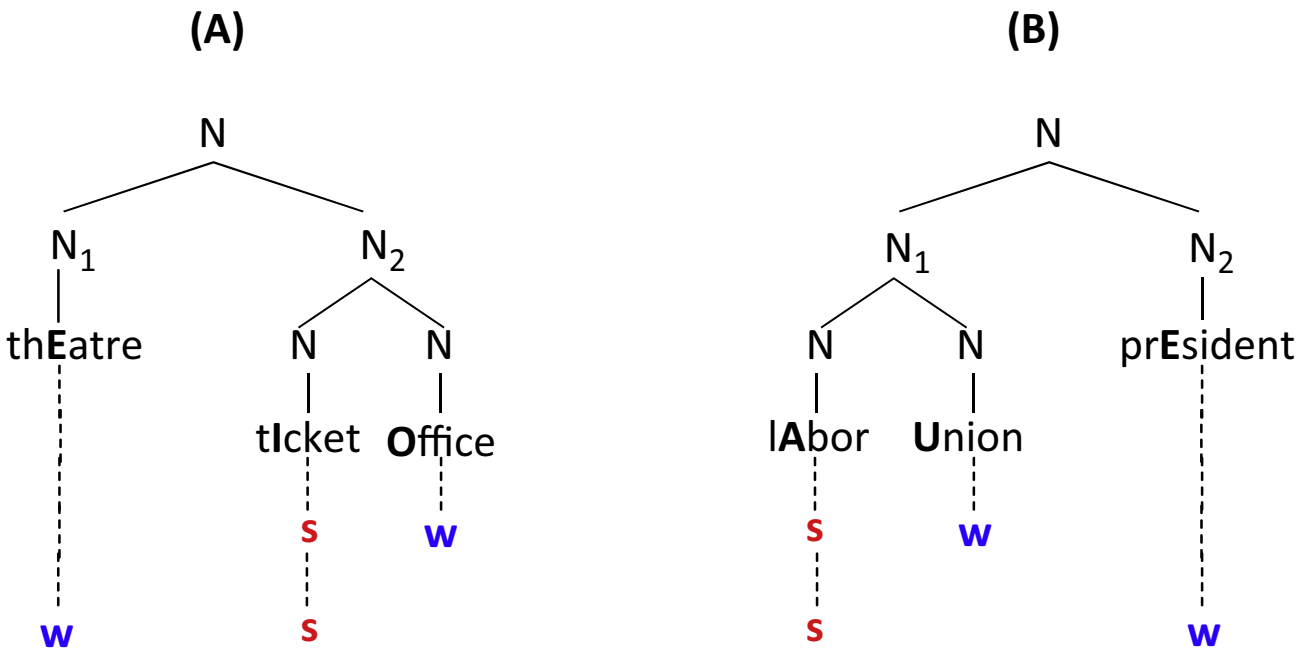


2) Parasitic Gap licensing





3) Compound stress



Conclusion: For determining which word strings are part of language, structure is important while linear order isn't.

Adjective order (Scontras et al. 2019)

Generalization ([dixon77r][cinque94g] and others):

(1) The hierarchical order of adjectives: (Scontras et al. 2017)
dimension $\ll$ value $\ll$ age $\ll$ physical $\ll$ shape $\ll$ color $\ll$ material

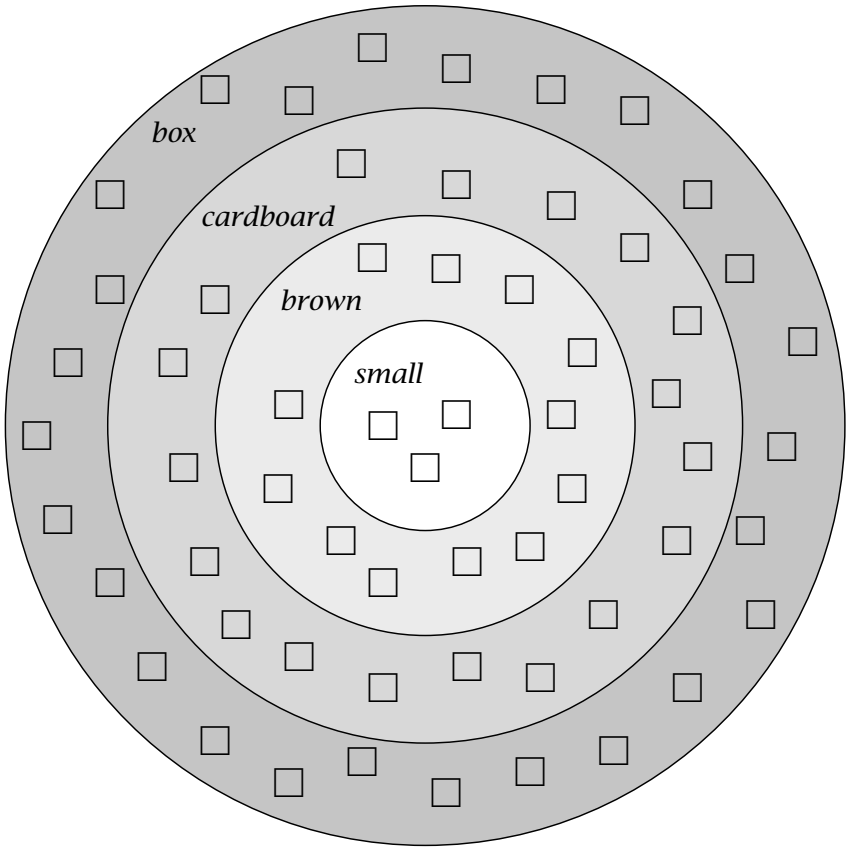
(2) a. English:
the small red ball

b. Mokilese: ([harrison76])
pwo:la wa:ssa siksikko
ball red small-DET

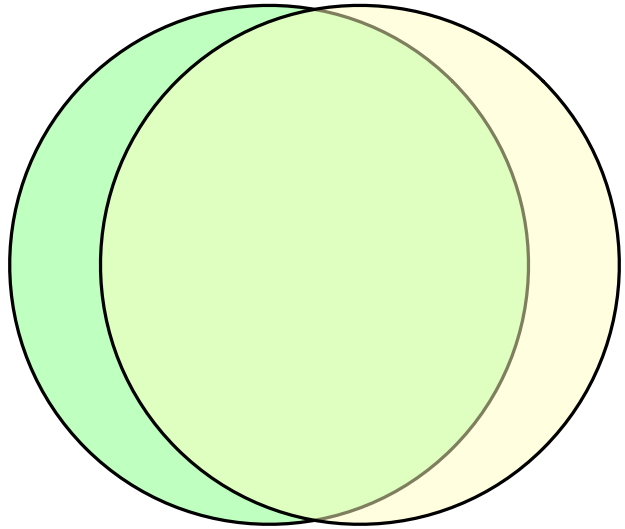
Generalization: (Scontras et al. 2017)

(3) The more objective description an adjective provides, the closer to the underlying noun position it occurs.

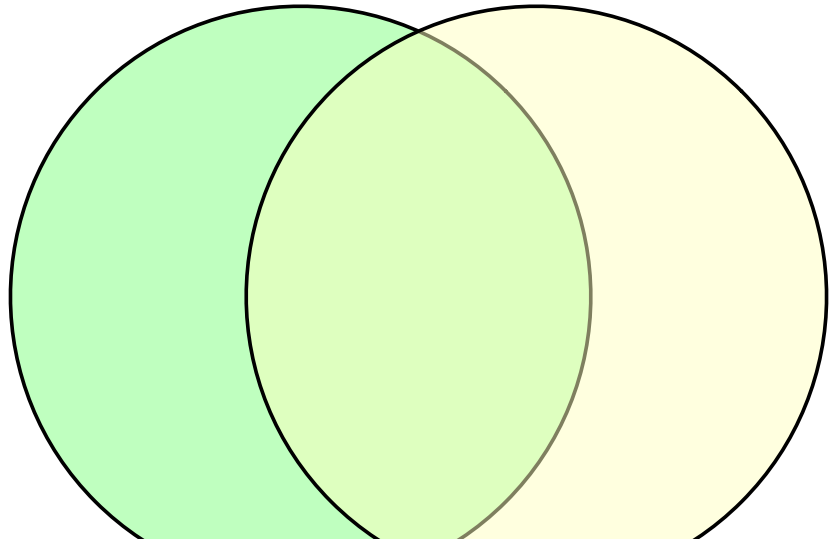
Structure-sensitive informativity account



objective



subjective



Distributed Morphology

Summary from Bobaljik (2017):

(2)

Syntax-all-the-way-down: The primary mode of meaningful composition in the grammar, both above and below the word level, is the syntax. Syntax operates on sub-word units, and thus (some) word-formation is syntactic.

(3)

Late Insertion or Realization: The pieces manipulated by the syntax (*functional morphemes*) are abstract, lacking phonological content. The pairing of phonological features with the terminals of the syntax (*vocabulary insertion* or *exponence*) happens post-syntactically, in the mapping from syntax to phonological form (PF).

Suppletion sensitive to structure 1

(21)

a. Khrushchev **stood,** threatening the Western imperialists.

b. Khrushchev **understood** / ***understanded.**
[[understand]$_{V}$ INFL]

c. Khrushchev **grandstanded** / ***grandstood**, threatening the Western imperialists..
[[[grandstand]$_{N}$]$_{V}$ INFL]

Suppletion sensitive structure 2

	POSITIVE	COMPARATIVE	SUPERLATIVE	
a.	kam	kam-tar	kam-tar-in	‘little’ (Persian)
b.	šüa	šüan-ar	šüan-ar-ste	‘pretty’ (Cimbrian German)
c.	mlad-ý	mlad-ší	nej-mlad-ší	‘young’ (Czech)
d.	nagy	nagy-obb	leg-nagy-obb	‘big’ (Hungarian)
e.	nüs˚ə	ç’a-nüs˚ə	a-ç’a-nüs˚ə	‘pretty’ (Ubykh)

ABB suppletion patterns:

	POSITIVE	COMPARATIVE	SUPERLATIVE	
a.	god	bed-re	bed-st	‘good’ (Danish)
b.	špatn-ý	hor-ší	nej-hor-ší	‘bad’ (Czech)
c.	asko	gehi-ago	gehi-en	‘many’ (Basque)
d.	šig’	pɐr’-am	pɐr’-mus	‘good’ (Kildin Saami)
e.	kwad	nax	nax-deda	‘many’ (Kabardian)

Syntax insensitive to allomorphy & suppletion

German plurality:

(4)
a. Die grünen Büch-er sind schön.
the-PL green-PL book-PL are-PL pretty

b. Die grünen Flasche-n sind schön.
the-PL green-PL book-PL are-PL pretty

c. Die grünen Berg-e sind schön.
the-PL green-PL mountain-PL are-PL pretty

d. Die grünen Auto-s sind schön.
the-PL green-PL car-PL are-PL pretty

e. Sie sind schön.
3.PL are-PL pretty

Lexical Categories

(34) a. Kate(s) quickly marrying William was prompted by ...
b. Kate's quick marriage to William was prompted by ...

a. marrying $= [\sqrt{\text{MARRY}}$ – verb] – noun
b. marriage $= \sqrt{\text{MARRY}}$ – noun

If 'verb' and 'noun' are truly expletives, they are not predicted by a meaning first model.

Allosemy?

Atoms are interpreted depending on their context (e.g. Marantz 2013), example from Carston (2024):

√fetch ←→ FETCH* (= attractive) in a local adjectival context overtly realized as '-ing'

←→ FETCH (= get/retrieve) elsewhere

√liquid ←→ LIQUID* (= get rid of) in a local verbal context overtly realized as '-ate'

←→ LIQUID (= fluid) elsewhere

√book ←→ BOOK* (= register/reserve) in a local verbal context

←→ BOOK (= information tome) elsewhere

Homophony analysis in a meaning first structure. But ambiguity is predicted for 'fetching' and 'book' (but 'liquify' vs. 'liquidate').

Movement

Do we need a representation specific to movement structures such as structure sharing / remerge / Hopf algebra?

- We do not need a movement representation to capture the meaning.
- If meaning is first (Sauerland & Alexiadou 2022), we expect just a commutative Free Magma, i.e. planar binary trees.
- Also language evolved for thought, but movement/non-movement or trace/pronoun is just about pronunciation?

1. empirical summary: chains don't involve copies, but semantically compatible, partial descriptions

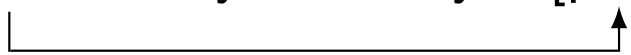
Chain without identity 1: Late adjunction

Example: 'Extraposed' adjuncts in English (Fox & Nissenbaum 1999)

(5) *I looked for a/*any picture very intensely by this artist.*
(a $\gg$ look for, *look for $\gg$ a)

Fox & Nissenbaum's proposal: Unpronounced 'overt' movement of 'a/any picture' followed by insertion of 'by this artist'. (also: Lebeaux 1991, 2009, Sauerland 1998, Fox 2000)

(6) I looked for a picture very intensely ~~a [picture~~ by this artist]



Chain without identity 2: Resumptive pronouns

Person mismatch with Dinka resumptive *ké(ek)* (van Urk, 2018):

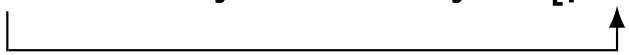
(7) *Wêek cíi Áyèn ké tîiN*
2PL PRF.OV Ayen.GEN 3PL see.NF
'You all, Ayan has seen [them].'

Van Urk's proposal: Movement of plural 'you' followed by PF-deletion of 2-nd person features in a chain. (also: Scott 2021, Mendes & Ranero 2021, Georgi & Amaechi 2022)

(8) [SECOND, PL] cíi Áyèn [~~SECOND~~, PL] tîiN.

Traces as indexed descriptions

(9) I looked for a picture very intensely ~~a [picture~~ by this artist]



(10) [a picture by this artist] λx I looked for [the picture x] very intensely.

Fox (2017): further support for double interpretation

Williams's generalization

(1') a. John saw an [$_{NP}$ alleged [[mouse] [from Mars]]]
∃x [alleged[λw. mouse(w, x) & from-Mars(w, x)] & J. saw x] (*alleged* > &)

b. John saw an [$_{NP}$ [alleged mouse] [from Mars]]
∃x [alleged[λw. mouse(w, x)] & from-Mars(x)] & J. saw x] (& > *alleged*)

Pesetsky's observation:

(3) John saw an alleged alien yesterday from Mars.
Predicted meaning:
∃x alleged[λw. alien(w,x)] & from-Mars(x) & J. saw x (allege & from Mars)
#There is something John saw which is alleged to be an alien and in reality is from Mars.

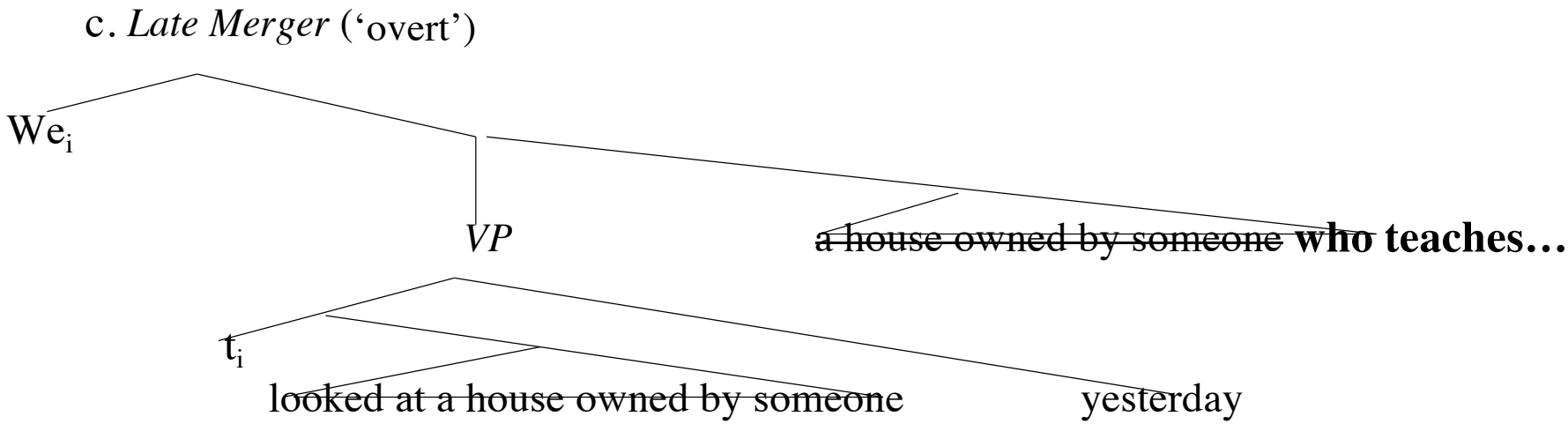
Second argument

Low relative clauses can be extraposed:

(16) a. I bought a car owned by Fred.
b. *By whom did you buy a car owned?

(17) ? We [[[looked at [a house owned by someone]] yesterday] who teaches at UCLA].

Analysis:



Double interpretation observed

(30) a. John did nothing prohibited by anyone, without being reprimanded, who teaches in this school.
b. #John did nothing required by anyone, without being reprimanded, who teaches in this school.

(31) a. You can do nothing prohibited by anyone, without being expelled, who teaches in this school.
b. #You can do nothing required by anyone, without being expelled, who teaches in this school.